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ABSTRACT

This review of the literature addresses scientific and methodological concerns of research with children from various racial and ethnic backgrounds in the United States. It first identifies three major demographic trends: (1) the increasingly multiethnic and multilingual nature of American society; (2) the increasing number of children in poverty; and (3) the increased risk of needing special education services when conditions of poverty and racial and language diversity exist. Specific challenges to researchers are discussed, including the relationship among race, ethnicity, socioeconomic status, and gender. The importance of epistemological considerations is also noted, especially considering issues of race categorization, ethics, and human values. Issues raised by the underlying assumptions of quantitative research methodology are noted, including sampling, instrumentation, and measurement. The importance of the mutual support of research and practice is stressed. (Contains 50 references.) (DB)

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Scientific and Methodological Concerns in Research: Perspectives for Multicultural Learners

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Scientific and Methodological Concerns in Research: Perspectives for Multicultural Learners

Cheryl A. Utley and Festus E. Obiakor

> American society is complex and culturally pluralistic. To treat its heterogeneity as if it simply reflected different degrees of compliance with one cultural standard is to misunderstand its true nature. We must begin by acknowledging the integrity of the diverse social-cultural frames of reference and understanding them on their own terms....We must take account of the cultural diversity of the nation's children as it bears on their attainment in our schools. (Boykin, 1986, p. 87)

There is an increasing awareness that several major trends surrounding the demography of the United States population have intersected to bring issues related to race, ethnicity, socio-economic status, and gender to the forefront in research with multicultural children. Rodriguez (1990) noted that the first major trend influencing the schooling of children is that society is becoming more increasingly multiethnic and multilingual. Earlier, Pallas Natriello, and McDill (1989) analyzed projected data by the U.S. Bureau of the Census and reported that the number of Caucasian students is expected to decline about 13% from 1982 to 2020. For Hispanic-American youngsters, ages 0- to 17-year olds, trends show that they will increase from 5.9 million in 1982 to 18.6 million in 2020. The population of African-American youth, under the age of 18, is projected to rise from 9.3 million in 1982 to 11.9 million in 2020, an increase of 22%.

The second trend is that during the period of 1984 to 2020, estimates showed that the number of children in poverty will substantially increase from 14.7 million to 20.1 million (Pallas Natriello, & McDill, 1989). Our educational system will be responsible for teaching approximately 5.4 million more children in poverty in 2020, than in 1984. Additional data indicated that children living in single-parent homes will increase from 16.2 million in 1984 to

21.1 million in 2020, an increase of 30%. A dramatic increase of 7.6 million children is expected in the number of children residing with mothers with low levels of educational attainment, from 13.6 million to 21.2 million. And finally, the proportion of children from Hispanic-American backgrounds, who speak a primary language other than English, is expected to increase from 2.5% in 1982 to approximately 7.5% by 2020.

The third trend is that students are more at-risk (and will continue to be) for special education services when issues of poverty, race, and language are a part of a student's background (Baca & Almanza, 1991; Harry, 1992; Utley, 1995a, 1995b). Cultural, social, and economic factors are strongly linked to the classification and statistical representation of multicultural students in special education. Gender differences also exist in the referral, classification, and placement of multicultural students into special classes. Gottlieb, Alter, Gottlieb, and Wishner (1994) found that boys are referred for special education services twice as often as girls (68% versus 32%). Citing statistics by McLaren and Bryson, Stoneman (1990) reiterated the finding that male-to-female ratios averaged about 1.6:1, with evidence of an overrepresentation of males diagnosed with mild mental retardation.

Our purpose in this work is to present scientific and methodological concerns of research with racial and ethnic children in the United States. Entwisle and Astone (1994) stated that an understanding of the scientific relevance of constructs such as (a) race, (b) ethnicity, (c) socioeconomic status, and (d) gender are central to comprehending human development, individual developmental trajectories as well as the social processes within families, schools, neighborhoods, hospitals, and other institutions that provide context frameworks for learning. Because researchers have multiple opportunities to conduct comparative research studies on the

culture and schooling of multicultural children, a clarification of issues where problems are put into an empirical perspective is warranted (Utley, 1995a). Scientific and methodological problems are reviewed so that researchers can improve their existing knowledge base in planning and conducting future studies.

CHALLENGES TO RESEARCHERS

In theory and practice, researchers must have knowledge of group characteristics and modalities so that they can explain and predict the probability of an individual's behavior (Banks & Banks, 1993). They must also use our knowledge base to analyze ways in which such variables as (a) race, (b) ethnicity, (c) socioeconomic status, and (d) gender interact and influence student behavior. The criteria for determining which individuals belong in what categories are created, constructed, and shaped by society. Thus, researchers are able to (a) define terms with precision and accuracy, (b) examine epistemological considerations for studying racial and ethnic groups, and (c) develop research problems, select samples, use sound methodological procedures, interpret data, make conclusions, and recommend solutions.

Race and Ethnicity

Conceptually, there are many definitions of the variables race, ethnicity, socioeconomic status, and gender. Banks and Banks (1993) defined race as a social category related to physical characteristics or phenotypes. Thomas and Grimes (1995) noted that race is used as a "social identifier of persons who have an African, Asian, Indian, or Hispanic origin through at least one ancestor" (p. 338). The most commonly used method for identifying racial and ethnic groups in the United States is the classification scheme by the U.S. Bureau of Census. They are as follows: (a) Non-Hispanic White, (b) Hispanic, (c) Black, (d) Native-American, and (e) Asian and Pacific.

These groups can be further divided into the following fourteen groups: (a) Non-Hispanic White, (b) Non-Hispanic Black, (c) Puerto Rican, (d) Mexican, (e) Cuban, (f) Japanese, (g) Chinese, (h) Hawaiian, (i) Filipino, (j) Vietnamese, (k) American Indian, (l) Korean, (m) Asian-Indian, and (n) other.

Entwisle and Astone (1994) identified four major problems associated with the type of classification scheme shown above. The first problem is that the U.S. Bureau of the Census confounds race and ethnicity with more than one category that is meaningful to respondents (e.g., Hispanics, Latinos, Puerto Ricans). Second, there is abundant information gathered on the ethnicity of new immigrants (e.g., Asians and Pacific Islanders) who have arrived in the U.S., while a minimum amount of information on other groups is collected (e.g., Italians, Jamaicans, and Haitians). Third, this classification scheme does not differentiate between characteristics attributed to regional differences among different racial and ethnic groups (e.g., tribal affiliations of Native-American people). Fourth, individuals from various ethnic groups prefer to be acknowledged by different categories than those identified by the census (e.g., Black versus African-American).

Culture

A range of definitions of culture has been presented by social scientists and anthropologists (Frisby, 1992). Frisby revealed six connotative meanings that are associated with the terms, "culture" and "cultural differences." They are as follows:

1. Culture consists of characteristic patterns of living, customs, traditions, values, and attitudes that are associated with

broad differences in the intercontinental habitation of a society's level of technological sophistication.

2. Culture refers to the artistic, humanitarian, or scientific achievements of members of one's racial/ethnic group or the peoples of one's ancestral homeland.

3. The concept of culture can be labeled as "race consciousness," suggesting a common set of attitudes and beliefs that may guide an individual's feelings about, interests in, or identification with his/her racial group.

4. Culture refers to values and norms of the immediate context within which children are socialized. Often researchers refer to "the culture of the family," "culture of poverty," or the "culture of the schools."

5. Culture is defined as relatively superficial differences between American ethnic or racial groups in such characteristics as popular clothing or fashion styles, music or dance styles, styles of religious worship, culinary traditions, or speech and language styles.

6. Culture is defined as those persons who are racially different (especially groups who are phenotypically distinct) and culturally different. (pp. 533-534)

Banks and Banks (1993) defined culture as "the symbolic, ideational, and intangible aspects of human societies manifested in artifacts, tools, and other tangible cultural elements such as language and behavior" (p. 8). They identified six components that are useful for

interpreting the behaviors of teachers and students. These are (a) values and behavioral styles, (b) languages and dialects, (c) nonverbal communication, (d) cultural cognitiveness, (e) perspectives and world views, and (f) identification.

Apparently, culture has been recognized as a key factor in student learning. Shade and New (1991) stated that culture "induces different approaches to how individuals use their minds by providing a set of rules that become preferred methods of acquiring knowledge" (p. 321). In studying African-American learners (Shade, 1989), Hmong learners (Hvitfeldt, 1986), Native-American learners (Utley, 1983), and Mexican-American learners (Saracho, 1989) and how they relate to the classroom environment, their unique behavioral, communication, and learning styles were identified. Shade and New (1991) wrote:

> Researchers have found that African-Americans are more likely to be field-dependent; that they do not perceive or identify the forms as readily as other groups. The same results are found for Hmong or Laotian immigrants. On the other hand, some Native-American students are more likely to be field-independent. Many researchers suggest that Mexican-American students are also field-dependent. There perceptual style may be situationally and contextually based. (p. 322)

Ethnicity

Ethnicity, as described by DeVos (1975), is an attribute of membership in a group that is set off by its ethnic or racial uniqueness and personal identity. More specifically, Longstreet (1978) and Bennett (1986) agreed that is the portion of cultural development that occurs before an individual is in complete command of his or her abstract intellectual powers. They also noted that ethnicity is formed primarily through the individual's early contacts with family, neighbors, friends, teachers, and others, as well as with his or her immediate environment of the home and neighborhood. Aspects of ethnicity include (a) verbal communication, (b) nonverbal

communication, (c) orientation modes, (d) social value patterns, and (e) intellectual modes of learning. An ethnic group has a historic origin, a shared heritage and tradition, and common values, behaviors, economic and political interests.

Socioeconomic Status

Another overarching idea permeating the U.S. culture is the concept of social class. The term, "social class" refers to a group of people who have social class status based on criteria such as income, occupation, education, values, and behaviors. Categories include lower class, working class, middle class and upper class (Banks & Banks, 1993). In traditional research studies, socioeconomic status is determined by a member/adult (i.e., usually the father figure) of a household whose income level has the most influence on the economic status of the family. There are two major problems with this approach, particularly with racial and ethnic groups. First, racial and ethnic families in the United States are diverse in nature with children residing in two-parent, single-parent, and stepparent families. The economic status of the family may be influenced by the breadwinner of the family in the residence than by the biological father or the children may have access to financial contributions provided by the biological father. Second, if the primary caretaker is the mother, then the economic indicator of socioeconomic status is determined by the mother's occupational status. Even though the mother may have a prestigious occupation, her earnings may represent a less valid indicator of the economic resources available to the family than if the income level of the father figure was used to determine socioeconomic status.

Gender

Gender role expectations for males and females are sanctioned within society and vary across ethnic groups and social classes (Davenport &Yurich, 1991). For example, role expectations for males and females are different among Caucasians, African-Americans, Hispanic-Americans, Native-Americans and Asian-Americans. Normative role expectations for African-American men (as compared to African-American women), their underachievement, disproportionate placement in special education, and unemployment have brought attention to their endangered status within their race (Jennings, 1994). Within social class categories, for example, upper-middle class women are negatively viewed if they work outside of the home, while lower-class women are expected to work and to become wage earners in the family.

EPISTEMOLOGICAL CONSIDERATIONS

Certain epistemological universals must be considered in the design and execution of the research process (Stanfield, 1993). Boykin (1987) noted that presuppositions and biases affect the research process and researchers must "entertain the possibility that truth in science is based considerably on a social-cultural consensual reality" (p. 88). A fundamental research question that must be addressed is: What are some of the essential epistemological considerations that researchers should examine regardless of methodological approaches?

Race Categorization

The construction of race categories by social scientists has been problematic. Traditional descriptions of racial groups with distinct phenotypic attributes are linked to presumptions about moral character, personality, interpersonal behavior, and intelligence and are often depicted in a negative way in United States history, culture, and society. Many of the descriptions about racial

categories used by researchers are grounded in mythologies of racial categorization and beliefs about the inherent superiority and inferiority of populations along phenotypic and genetic lines (Gould, 1981; Montagu, 1986; Moore, 1991; West, 1993). The everyday language and vocabulary about racial groups influence perceptions and knowledge base about human characteristics and qualities among racial groups (Hilliard, 1995; Obiakor, 1996). As a consequence, social scientists and other researchers have been socialized to accept race-laden assumptions about human nature. Thus, socially constructed racial groups are categorized in a simplistic manner, with little empirical meaning, except in stereotypical ways (Obiakor, 1996; West, 1993).

A second dilemma in race categorization is the construction of statistical categories derived from a quantifiable index by the government. In quantitative research, the objective codification of racial groups assumes that each individual has a similar racial identity, not a differential identity. Because an individual looks a certain way and has "X" or "Y" identity characteristics, then researchers assume that racial groups are homogeneous in nature (Obiakor, 1994). The erroneous assumption is that racial and ethnic groups who are economically similar comprise a homogeneous group (see Cole, 1986). Apparently, homogeneous descriptions about racial groups are advanced, suggesting that a monolithic identity exists within those groups of individuals. The notion of within-group variability based on quantifiable data is not considered a viable paradigm in race and ethnic research.

Ethics

In status-related research with racial and ethnic groups, the issues of ethics and human values are extremely important and controversial. Stanfield (1993) remarked that "researchers

in mainstream disciplines rarely if ever reflect seriously on the effects their racial and ethnic identities and consciousness might have on what they see and interpret in race and ethnicity studies" (p. 25). He further stated that value-neutral methods of data collection and interpretation have been difficult to develop because researchers have not been able to separate out their own personal philosophies in the research process and have been able to rationalize their research conclusions.

In race and ethnicity research, cultural standards of data generalization are typically based upon universal statements reflecting Eurocentric normative and scientific principles. The majority of research may be categorized as those done (a) to demonstrate cultural differences, (b) to demonstrate socioeconomic differences, and (c) to demonstrate racial and ethnic differences (Cole, 1986). In all three categories of research, the hypotheses are the same -- "there is a difference" -- and "the results are predictable." For example, low socioeconomic level racial and ethnic groups perform poorer on academic or learning tasks, exhibit different behaviors, or demonstrate themselves to be less knowledgeable than comparison groups who are comprised of middle-upper socioeconomic levels. Consequently, cultural effects on achievement, socialization, development, and/or performance are difficult to determine because appropriate comparison or control groups are rarely used in the reported research.

In the research process, researchers have applied Eurocentric concepts of families and their psychological development to the experiences of racial and ethnic groups (Slaughter-Defoe, Nakagawa, Takanishi, & Johnson, 1990). The cultural-deficit model is the most prevalent conceptual model in studying the achievement failures of African-American failures and their children (Spencer, Kim, & Marshall, 1987). "Blaming the victim" mentality was the underlying

assumption that was used to describe the results of studies and identify solutions to problems of childhood poverty and educational underachievement (Barker, 1993). For example, underachievement among African-American children was due to pathological and dysfunctional family environments. Everyday life in poor neighborhoods was negatively affected by poverty. Methodological problems included confounding variables such as father absence and family income. In addition, matriarchal or female-headed households in African-American working class families, when compared to White middle-class families, were interpreted as deviant and pathological. This controversial line of research suggests that alternative family structures are viewed as immoral and as social problems. There was no attention directed towards understanding the family structure as an explanation of underachievement, diversity, and gender differences. In essence, cultural standards, data collection procedures, and generalization strategies in social scientific and psychological research have studied specific racial or ethnic groups that represent only a small segment of the population and generalized the behavior of that subgroup to the entire population, regardless of socioeconomic status. This research process has led to the stereotyping of racial and ethnic groups that are paralleled with negative and deleterious consequences for those groups, in general (Bond, 1988; Boykin, 1987).

QUANTITATIVE RESEARCH METHODS

Eurocentric and universal paradigms have dominated the study of racial and ethnic groups (Kuhn, 1970). These approaches have employed *nomothetic* and *idiographic* research methods. The *nomothetic* approach is based upon procedures that are similar to the physical science and supports a universal viewpoint that concepts are basically reliable and valid across all cultures. Scientific theory and hypothesis testing procedures are used to make inferences and

to draw conclusions indicative of universal principles. On the other hand, the *idiographic* approach utilizes methods to discover certain events in society. Even though this latter approach does not adhere to the position that concepts have universal validity, they are appropriate for use within certain cultural settings (Padilla & Lindholm, 1995).

The underlying assumptions often associated with this approach, according to Padilla and Lindholm (1995), consist of the following: (a) the White middle-class American (typically the male) is the standard against which other groups should be compared; (b) the instruments used for assessing differences are universally applicable across groups, with perhaps only minimal adjustments for culturally diverse populations; and (c) although we need to recognize the sources of potential variance such as social class, educational attainment, gender, cultural orientation, and proficiency in English, these are nuisances that can be later discarded. These assumptions are still operative in educational research with ethnic groups and continue to be used in the testing of scientific theories. This approach ignores the influence of cultural, ecological, and situational factors on psychological and motivational processes.

Sampling Issues

One critical element in the research process is the demographic characteristics of the sample under study and the extent to which descriptive information about the sample will enable researchers to replicate their work (Padilla & Lindholm, 1995). Three primary questions deserve to be considered: (1) What are the demographic characteristics of the population? (2) Can a random and representative sample be obtained, and how? (3) Is the sample adequately described so that a replication can be carried out?

The research process must address the acquisition of representative samples from racial and ethnic groups and control for the confounding of variables such as location (i.e., urban, rural, or suburban), acculturation, language, and social class. For example, African-American, Hispanic-American, and White samples are often drawn from populations that differ in size and diversity of the educational and occupational experiences for each group (Helms, 1992; Scott & Shaw, 1985). A related concern is that basic demographic information (i.e., gender, age, social status, and race) concerning the sample may be presented, however, information is described in a general way for the entire sample. Descriptive information outlining demographic factors in relation to each variable is crucial to the interpretation of results. For example, if a researcher is investigating the effects of race and socioeconomic factors to explain variations in motivational orientation or academic achievement between groups, the researcher must present a breakdown of each demographic factor relative to each dependent measure. This kind of analysis is essential in interpreting test scores as valid indicators of racial and ethnic group differences on experimental and standardized tests.

Instrumentation

Issues of instrumentation and measurement are central to understanding the outcomes of research with racial and ethnic groups. Instruments such as rating scales and achievement tests may be appropriate measures for White middle-class children and their families, however, caution must be exerted when these same instruments are used for research with racial and ethnic groups (Hilliard, 1995; Obiakor, 1994; Padilla & Lindholm, 1995). Padilla and Lindholm (1995) reiterated questions that researchers must ask. These questions are:

1. Are the selected instruments appropriate for use with the ethnic group in question? Is there equivalence across cultures of important concepts that are used in educational research? Have the instruments been accurately translated?

2. Is it necessary to use specially designed instruments to assess such characteristics such as acculturation, ethnic identity, English-language proficiency, or culturally specific learning strategies? How are such instruments identified for use with minority populations?

3. Do minority students respond to questionnaires and other data-collecting instruments in the same manner as majority group members? (p. 104)

From the perspectives presented above, the first group of questions address the appropriateness or cultural equivalence of instruments used in research with racial and ethnic groups. Lonner (1981) described four types of equivalence: (a) functional equivalence, (b) conceptual equivalence, (c) linguistic equivalence, and (d) psychometric equivalence. For example, psychometric equivalence (i.e., the extent to which tests measure the same things at the same levels across cultural groups) cannot exist unless a construct and test items are communicated in a language that is comprehensible. The cross-ethnic equivalence of items on tests is, therefore, essential when items on achievement tests, self-esteem scales, and/or parental measures are translated into Spanish. Knight, Tein, Shell, & Roosa (1992), in studying the parenting and family interactions among Hispanic and Anglo American families, examined the psychometric qualities of Children's Report on Parental Behavior Inventory, the Parent-Adolescent Communication Scale, the Family Adaptability and Cohesion Evaluation Scale. These researchers examined items on these scales for their cultural relevance to the Hispanic

community and found that (a) items and their wording or phrasing either have ethnically specific meaning or an unclear meaning to members of this culture, and (b) the items were poorly worded or vague in its meaning to Hispanic-American respondents. With regard to the study of equivalence of test items on standardized cognitive tests used among African-American and White students, Helms (1992) indicated that these tests have not been tested empirically for cultural equivalence. She concluded that the "lack of explicit standardized testing alternatives is an inability of psychologists and psychometricians to articulate the relevant issues as they affect children from various racial and ethnic groups" (p. 1090). In the absence of psychometric equivalence, it is virtually impossible to ascertain what the statistics and results really mean, rendering the conclusions debatable.

The second group of questions address the issue of whether or not we need instruments with certain specifications to meet the needs of racial and ethnic groups. Throughout the history of psychological testing, culturally-specific behaviors of racial and ethnic groups have not been considered as important issues in the development and use of tests with these groups of individuals (Hilliard, 1995; Midgette, 1995; Obiakor, 1994, 1995). Items on different instruments may have little or no relevance to respondents in the research study. Factors such as English-language proficiency, ethnic identity, achievement and cognitive ability, motivation, acculturation, and socialization are noteworthy so that we can have a better understanding of the heterogeneity among groups, cultural changes, and relationships among factors that influence empirical research studies.

According to Padilla and Lindholm (1995), the third group of questions must be considered when using Likert-type scales with racial and ethnic groups. As researchers, we are

concerned with the extent to which racial and cultural groups use the same test-taking strategies when responding to the same material. Citing research by Hui and Triandis (1989), Marin and Marin (1991), and Bachman and O'Malley (1994), Padilla and Lindholm (1995) concluded that (a) African-American respondents have a tendency to select the extreme responses on instruments using a Likert-type format, and (b) low-acculturated Hispanic -American respondents tend to exhibit an extreme response set on these instruments.

Measurement

Throughout this work the importance of understanding how race, ethnicity, gender, and socioeconomic factors affect the outcomes of quantitative research has been discussed. Researchers must also consider these factors in relation to issues of reliability and validity (Hilliard, 1995; Midgette, 1995; Obiakor, 1994, 1995; Ysseldyke, Algozzine, & Thurlow, 1992). Padilla and Lindholm (1995) recommended that an internal-consistency reliability (Cronbach alpha) be computed separately for each racial and ethnic group and their comparison group. Acceptability of a reliability estimate depends upon the basis of the scores and the possible consequences following the decisions. As they pointed out, the "reliability of an instrument should be as high as possible (minimum of r = .70) for more consequential decisions, but can be lower (r = .50) for research purposes involving few, if any, decisions are to be made about the educational programming of minority students" (p. 109).

One final consideration in quantitative research is whether or not the constructs have the same meaning for each racial and ethnic group. Sometimes the undergirding assumption is that everyone understands and views a construct in the same manner. If not, the central question should be: Why should an instrument measure the construct that it has failed to define? Padilla

and Lindhom (1995) recommended exploratory factor analysis as a procedure for determining whether educational and psychological instruments truly measure the construct in question.

CONCLUSIONS

In this work, we discussed several critical issues that must be addressed by researchers when studying racial and ethnic groups. Researchers must not only understand concepts such as race, ethnicity, socioeconomic status, and gender, but they must also be able to use ethical standards in conducting research. Furthermore, researchers must examine closely the traditional and underlying assumptions of quantitative research methods and study the issues of relevance to racial and ethnic groups in the planning and implementation of empirical research procedures. We believe that research and practice must go hand-in-glove. In other words, research must support practice and vice-versa. However, this effort will not materialize until multiculturalism on all research programs is emphasized.

References

Baca, L., & Almanza, E. (1991). Language minority students with disabilities. Reston, VA: Council for Exceptional Children.

Bachman, J.G., & O'Malley, P.M. (1984). Black-White differences in self-esteem: Are they affected by response style? American Journal of Sociology, 90, 624-639.

Banks, J.A., & Banks, C.A. (1993). Multicultural education: Issues and perspectives. Boston, MA: Allyn and Bacon.

Barker, N.C. (1993). The self and the Black male: Implications for school and society. In F.E. Obiakor & S.W. Stile (Eds.), Self-concept of exceptional learners: Critical perspectives for educators (pp. 168-183). Dubuque, IA: Kendall/Hunt.

Baumeister, A. A., Kupstas, F.D., Klindworth, L.M., & Zanthos, P.W. (1991). Guide to state planning for the prevention of mental retardation and related disabilities associated with socioeconomic conditions. Washington, DC: The President's Committee on Mental Retardation.

Bennett, C.I. (1990). Comprehensive multicultural education: Theory and practice. Boston, MA: Allyn and Bacon.

Bond, L.A. (1988). Teaching developmental psychology. In P.A. Bronstein & K. Quina (Eds.), Teaching a psychology of people: Resources for gender and sociocultural awareness (pp. 45-52). Washington DC: American Psychological Association.

Boykin, A.W. (1979). Black psychology and the research process: Keeping the baby but throwing out the bath water. In A.W. Boykin, A.J. Franklin, & J.F. Yates (Eds.), Research directions of Black psychologists (pp. 85-103). New York: Russell Sage Foundation.

Boykin, A.W. (1986). The triple quandary and the schooling of Afro-American children. In U. Neisser (Ed.), The school achievement of minority children: New perspectives (pp. 57-92). Hillsdale, NJ: Lawrence Erlbaum.

Cole, L. (1986). The social responsibiity of the minority researcher. In F.H. Bess, B.S. Clark, & H.R. Mitchell (Eds.), Concerns for minority groups in communication disorders (pp. 93-100). Rockville, MD: American Speech-Language-Hearing Association.

Davenport, D.S., & Yurich, J.M. (1991). Multicultural gender issues. Journal of Counseling & Development, 70, 64-71.

De Vos, G. (1975). Ethnic pluralism: Conflict and accommodations. In G. De Vos & L. Romanucci-Ross (Eds.). Ethnic identity: Cultural continuities and change. Palo Alto, CA: Mayfield.

Entwisle, D., & Astone, N.M. (1994). Some practical guidelines for measuring youth's race/ethnicity and socioeconomic status. Child Development, 65, 1521-1540.

Frisby, C.L. (1992). Issues and problems in the influence of culture on the psychoeducational needs of African-American children. School Psychology Review, 21, 532-551.

Gottlieb, J., Alter, M., Gottlieb, B.W., & Wishner, J. (1994). Special education in urban America: It's not justifiable for many. Journal of Special Education, 27, 453-465.

Gould, S.J. (1981). The mismeasure of man. New York: Norton.

Harry, B. (1992). Cultural diversity, families, and the special education system. New York: Teachers College Press.

Helms, J.E. (1992). Why is there no study of cultural equivalence in standardized cognitive ability testing? American Psychologist, 47, 1083-1101.

Hilliard, A.G. (1995). Culture, assessment, and valid teaching for the African-American student. In B.A. Ford, F.E. Obiakor, & J.M. Patton (Eds.), Effective education of African-American learners: New perspectives (pp. ix-xvi). Austin, TX: Pro-Ed.

Hui, C., & Triandis, H. (1989). Effects of culture and response format on extreme response style. Journal of Cross-Cultural Psychology, 20, 296-309.

Hvitfeldt, C. (1986). Traditional culture, perceptual style, and learning: The classroom behavior or Hmong adults. Adult Education Quarterly, 36, 65-77.

Jennings, R.R. (1994). The African-American community's role in educating its men. In R.R. Jennings (Ed.), The status of Black men in America. Lawrence, KS: National Council of African-American Men, Inc.

Knight, G. P., Tein, J. Y., Shell, R., & Roosa, M. (1992). The cross-ethnic equivalence of parenting and family interaction measures among Hispanic and Anglo-American families. Child Development, 63, 1392-1403.

Kuhn, T.S. (1970). The structure of scientific revolutions. Chicago, IL: University of Chicago.

Longstreet, W. (1978). Aspects of ethnicity: Understanding differences in pluralistic classrooms. New York: Teachers College.

Lonner, W.J. (1981). Psychological tests and intercultural counseling. In P.B. Pedersen, J.G. Draguns, W.J. Lonner, & J.E. Trimble (Eds.), Counseling across cultures (pp. 275-303). Honolulu: East-West Center and University of Hawaii.

Marin, G., & Marin, B.V. (1991). Research with Hispanic populations. Newbury Park, CA: Sage.

McLaren, J., & Bryson, S. E. (1987). Review of recent epidemiological studies of mental retardation: Prevalence, associated disorders, and etiology. American Journal of Mental Retardation, 92, 243-254.

Midgette, T.E. (1995). Assessment of African-American exceptional learners: New strategies and perspectives. In B.A. Ford, F.E. Obiakor, & J.M. Patton (Eds.), Effective education of African-American learners: New perspectives (pp. 3-25). Austin, TX: Pro-Ed.

Moore, A. (1991, March 25). Need someone to blame? Just say a black man did it. The Wichita Eagle, p. 11A.

Montagu, A. (1986). Foreword. In R. Benedict & G. Weltfish (Eds.), The races of mankind (pp. 1-4). New York: Public Affairs Committee, Inc.

Mosley-Howard, G. (1995). Best practices in considering the role of culture. In A. Thomas and J. Grimes (Eds.), Best practices in school psychology-III (pp. 337-346). Washington, DC: The National Association of School Psychologists.

Obiakor, F.E. (1994). The eight-step multicultural approach: Learning and teaching with a smile. Dubuque, IA: Kendall/Hunt.

Obiakor, F.E. (1995). Self-concept model for African-American students in special education settings. In B.A. Ford, F.E. Obiakor, & J.M. Patton (Eds.), Effective education of African-American exceptional learners: New perspectives (pp. 71-88). Austin, TX: Pro-Ed.

Obiakor, F.E. (1996, January 24). The power of the word. The Emporia Gazette, p. 7.

Padilla, A.M., & Lindholm, K. J. (1995). Quantitative educational research with ethnic minorities. In J.A. Banks & C.A. Banks (Eds.), Handbook of Research on Multicultural Education (pp. 97-113). New York: Macmillan.

Rodriguez, F. (1990). Equity in education: Issues and strategies. Dubuque, IA: Kendall/Hunt.

Saracho, O. (1989). Cultural differences in the cognitive style of Mexican-American students. In B.J. Shade (Ed.), Culture, style, and the educative process (pp. 129-136). Springfield, IL: Charles C. Thomas.

Scott, R.R., & Shaw, M.E. (1985). Black and White performance on graduate school and policy implications of the use of Graduate Record Examination scores in admission. Journal of Negro Education, 54(1), 14-23.

Slaughter-Defoe, D.T., Nakagawa, K., Takanishi, R., & Johnson, D.J. (1990). Toward cultural/ecological perspectives on schooling and achievement in African- and Asian-American children. Child Development, 61, 363-383.

Shade, B. J. (1989). Culture, style, and the educative process. Springfield, IL: Charles C. Thomas.

Shade, B., & New, C.A. (1991). Cultural influences on learning: Teaching implications. In J.A. Banks & C.A. Banks (Eds.), Multicultural education: Issues and perspectives (pp. 317-331). Boston, MA: Allyn & Bacon.

Spencer, M.B., Kim, S., & Marshall, S. (1987). Double stratification and psychological risk: Adaptational processes and school achievement of Black children. Journal of Negro Education, 56, 77-87.

Stanfield, J. H. (1993). Epistemological considerations. In J. H. Stanfield II & R. M. Dennis (Eds.). Race and ethnicity in research methods (pp. 16-36). Newbury Park, CA: Sage.

Stoneman, Z. (1990). Conceptual relationships between family research and mental retardation. In N. W. Bray (Ed.), International review of research in mental retardation (Vol. 15) (pp. 161-202). Orlando, FL: Academic Press.

Utley, C.A. (1983). A cross-cultural investigation of field-independence/field-dependence as a psychological variable in Menominee Native-American and Euro-American grade school children. Madison, WI: Wisconsin Center for Education and Research.

Utley, C.A. (1995a, July). Scientific and methodological concerns in research with multicultural children. Paper presented at the Office of Special Education Programs Project Directors Conference, Washington, DC.

Utley, C.A. (1995b). Culturally and linguistically diverse students with mild disabilities. In C.A. Grant (Ed.), Educating for diversity: An anthology of multicultural voices (pp. 301-324). Needham Heights, MA: Allyn & Bacon.

West, C. (1993). Race matters. New York: Vintage Books.

Ysseldyke, J.E., Algozzine, B., & Thurlow, M.L. (1992). Critical issues in special education (2nd ed.). Boston, MA: Houghton Mifflin.